

Abstract

The invention relates to a device which enables to ensure or improve considerably the safety of storage, transfer, transport and handling of dangerous and/or potentially reactive products (206), under an industrial scale environment, at essentially atmospheric temperatures and pressures. The inherent danger of such products induce the risk of large-scale, unexpected and sometimes unexplained fires/explosions, and their massive spill out result in environmental pollution and sometimes toxic emissions. The inventive device introduces the principle of danger evaluation and of redundant levels of safety components and interventions aimed at keeping the risk of accident under control. In the particular embodiment concerning fuel gases-vapours, where fire/explosion can only occur in the presence of an oxidizer such as atmospheric oxygen, the device ensures that the fuel is prevented from remaining in contact or mixed with atmospheric air for instance, and prevents massive fuel spill out if the reservoir structure is ruptured following accidental impact or exposure to the heat of a surrounding fire.